

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference P 6 0 2 0 4 PCT	<b>FOR FURTHER ACTION</b> see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No. PCT/EP2004/014008	International filing date (day/month/year) 07/12/2004	(Earliest) Priority Date (day/month/year) 19/12/2003
Applicant  ATOTECH DEUTSCHLAND GMBH		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 5 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

1. **Basis of the report**

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).



With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐

**Certain claims were found unsearchable** (See Box II).

3. ☐

**Unity of invention is lacking** (see Box III).

4. With regard to the **title**,



the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,



the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regard to the **drawings**,

- a. the figure of the **drawings** to be published with the abstract is Figure No. 11



as suggested by the applicant.



as selected by this Authority, because the applicant failed to suggest a figure.



as selected by this Authority, because this figure better characterizes the invention.



none of the figures is to be published with the abstract.

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2004/014008

Box No. IV Text of the abstract (Continuation of item 5 of the first sheet)

The present invention relates to treatment units for the wet-chemical or electrolytic treatment of flat workpieces 1, such as metal foils, printed circuit foils or printed circuit boards, in which the workpieces are transported on a conveying path by means of conveying members 6. The treatment unit comprises carrier elements with recesses, said carrier elements being oriented to be parallel to the conveying path, and at least one module system for carrying the conveying members that consist of insertion elements 14, 26, preferably arranged in pairs, the at least one module system being configured such that it registers with and is preferably slidable into the recesses of the carrier elements. The treatment unit is preferably utilized in horizontal conveyORIZED lines.

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/014008

A. CLASSIFICATION OF SUBJECT MATTER  
C25D17/28

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

C25D H05K B65G C25F C23C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No. - - -
X	EP 0 959 153 A (PROCESS AUTOMATION INTERNATIONAL LIMITED; SHIPLEY COMPANY LLC) 24 November 1999 (1999-11-24)	1-4, 6, 10, 20-22
Y	paragraph '0015!; figure 1 paragraphs '0039! - '0041!; figures 7a-7d -----	5, 11-19
Y	US 4 607 590 A (PENDER ET AL) 26 August 1986 (1986-08-26) claim 1 -----	5
Y	DE 40 35 932 A1 (HOELLMUELLER, HANS, 7033 HERRENBERG, DE; HANS HOELLMUELLER MASCHINENBA) 14 May 1992 (1992-05-14) column 4, line 20 - column 5, line 17; figures 1-3 ----- -/--	11-19

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

16 November 2005

Date of mailing of the international search report

24/11/2005

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## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/EP2004/014008

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	DE 102 10 538 A1 (ATOTECH DEUTSCHLAND GMBH) 25 September 2003 (2003-09-25) paragraph '0045! - paragraph '0053!; figure 1 -----	1-4,6,8, 9,20,22
A	US 5 755 935 A (JACKSON ET AL) 26 May 1998 (1998-05-26) column 11, line 51 - column 12, line 12; figures 21,22 -----	5
A	US 5 592 958 A (GARDNER ET AL) 14 January 1997 (1997-01-14) column 4, line 20 - line 31; figure 6 -----	5

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/014008

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
EP 0959153	A	24-11-1999	CN 1236026 A EP 1541719 A2 EP 1541720 A2 US 6174417 B1	24-11-1999 15-06-2005 15-06-2005 16-01-2001
US 4607590	A	26-08-1986	NONE	
DE 4035932	A1	14-05-1992	WO 9208663 A1	29-05-1992
DE 10210538	A1	25-09-2003	AU 2003210324 A1 BR 0306621 A CN 1633525 A WO 03074768 A1 EP 1481116 A1 JP 2005519200 T TW 222952 B US 2005076837 A1	16-09-2003 28-09-2004 29-06-2005 12-09-2003 01-12-2004 30-06-2005 01-11-2004 14-04-2005
US 5755935	A	26-05-1998	NONE	
US 5592958	A	14-01-1997	NONE	